

# **Merced County Sheriff's Office Coroner Division**

CARE THE THE PROPERTY OF THE P 455 East 13th Street Merced, CA 95341-6213

Vernon H. Warnke Sheriff-Coroner

Mark A. Super, MD Forensic Pathologist

# REPORT OF AUTOPSY

AUTOPSY 🖾

EXTERNAL EXAMINATION []

DECEDENT: MOHAMMAD, FAISAL

CORONER CASE #: 15 – 38672

DATE/TIME OF DEATH:

11/04/2015 @ 08:09

INVESTIGATOR: N. Nakamura

DATE OF EXAMINATION:

11/05/2015

TIME OF EXAM:

13:15

**AGE:** 18

SEX: Male

HEIGHT: 70 in.

WEIGHT: 121 lb.

# **AUTOPSY FINDINGS**

- 1. Gunshot wound of left chest into abdomen:
  - a. Indeterminate range-type entrance wound, left lateral chest.
  - b. Fracture of left 8<sup>th</sup> rib.
  - c. Perforation of left lung.
  - d. Left hemopneumothorax (750 ml).
  - e. Perforations of spleen, liver, stomach, and left adrenal gland.
  - f. Perforation of abdominal aorta.
  - g. Hemoperitoneum (550 ml).
  - h. Impact fracture-groove, L2 vertebral body.
  - Perforation of right ilium of pelvis.
  - i. Large-caliber jacketed bullet recovered from right thigh.
  - k. Wound path: left to right, downward, and front to back.
- 2. Perforating gunshot wound of left groin:
  - a. Indeterminate range-type entrance wound, left base of penis.
  - b. Short subcutaneous wound path.
  - c. Exit wound, left base of scrotum.
  - d. Re-entrance wound, left femoral area.
  - e. Deep soft tissue wound path only.
  - f. Exit wound, left buttock.
  - g. No projectile is recovered.
  - h. Wound path: front to back, slightly downward, and slightly medial to lateral.
- 3. Minor blunt force injuries:
  - a. Abrasions of forehead and nose.
  - b. Abrasions of arms, especially left arm.

CAUSE OF DEATH: Gunshot wound of chest into abdomen. OTHER SIGNIFICANT CONDITIONS: Gunshot wound of left groin.

11-23-15

Mark A. Super, MD Forensic Pathologist

Date

### WITNESSES:

Deputy Coroners N. Nakamura and L. Ruscoe. Detectives Gomes and J. Caires, UC Merced PD. Detective S. Becerra, MCSO.

# **AUTOPSY ASSISTANT:**

Deputy Coroner L. Ruscoe.

## **IDENTIFICATION:**

The body is received encased in a white plastic body bag that is not locked. A coroner's ID bar code sticker is attached to the outside of the bag, labeled with the subject's name and case number. An orange coroner's ID bracelet encircles the right ankle over the sock, labeled with the subject's name and coroner's case number. A blue felt blanket lies on top of the body. This is not retained. The arms are handcuffed behind the back with police handcuffs. White paper bags have been previously placed on the hands, secured with drawstrings. These are each labeled right and left. These bags will be retained. The handcuffs are removed.

Photographs will be taken of the decedent and fingerprints will be obtained.

# **EVIDENCE OF MEDICAL INTERVENTION:**

Disposable defibrillator pads are adhered to the right pectoral area and left chest wall.

#### **CLOTHING:**

The following clothing items are on or about the body.

1. White socks with gray heels and toes. No significant stains or defects.

- A pair of black sweat pants are in place. The drawstring is tied. An ovoid gunshot defect is on the left mid-front. Sandy soil is stained about the right side. Another gunshot defect is on the left seat.
- 3. White briefs are in place. These are bloodstained on the front and left pant leg. A gunshot defect is on the front of the crotch area. An ovoid gunshot defect is on the left seat near the pant leg, surrounded by a dried bloodstain.
- 4. A hooded green and black windbreaker, brand Columbia Field Gear. This is open in the front and pushed aside exposing underlying garments. An ovoid gunshot defect is on the left side panel. An apparent ovoid gunshot defect is on the right lower front near the zipper.
- 5. A green jacket. The zipper pull is still up in the front, but the zipper is undone and open, pushed aside, exposing underlying garments. There is apparent gunshot damage to the lower mid-front through both sides of the zipper and an adjacent apparent gunshot defect is on the lower right front. An ovoid gunshot defect with a dried blood stain is on the left side. There is a scuff mark on the left sleeve near the elbow. A folded paper is in the left front pocket. This has lots of writing on it. I did not unfold this and examine it any further at the autopsy.
- A partially cutaway gray t-shirt that is blank on the front. An ovoid gunshot defect is on the left side surrounded by a large dried bloodstain. An irregular defect is on the lower front near the scissor cut.
- 7. A black nylon ski mask/hood, brand Cozia Design. No significant stains or defects.

# **EXTERNAL EXAMINATION**

The clothed, unembalmed body is that of a normally developed, thin but adequately nourished, Middle Eastern-appearing male who appears consistent with reported age of 18 years. The body measures 70 inches long and weighs 121 pounds, after removal of the body from the body bag and removal of clothing. Rigor mortis is fully developed in the cold body. Lividity is faint and posterior except over pressure points. Fragments of plastic debris are adhered to injuries about the left groin and scrotum. There is also debris adhered to the buttocks, and tiny pebbles that look like road surface are adhered to the back and right hand.

The scalp hair is black, wavy, and averages approximately 10 cm long. Facial hair consists of a sparse black mustache and beard. Minor injuries of the face are described below. The irides are brown and the corneas are filmy. The sclerae and conjunctivae are pale. No scleral hemorrhages or conjunctival petechiae. No periorbital cutaneous petechiae. The ears, nose and mouth are free of foreign material or abnormal secretion. The nasal skeleton and facial bones are palpably intact. The lips are uninjured and pale. The teeth are natural and in good condition.

The neck is stable and symmetric. There are no marks on the neck.

The chest is stable and symmetric. A gunshot wound of the left lateral chest is described below. There is no palpable subcutaneous emphysema. The abdomen is scaphoid and soft. No abdominal surgical scars. Along the right costal margin is an ovoid, 1 cm, nearly healed abrasion. The external genitalia are those of a circumcised adult male with bilaterally descended testes. The pubic hair has apparently been shaved, with short regrowth.

The extremities are symmetric, without angularity or deformity. The fingernails are uninjured and clipped short. The fingernails appear relatively neatly cared for. No clubbing of the digits. No hesitation type scars on the wrists. Faint track-like postmortem pressure marks are on both wrists consistent with handcuff marks. No needle tracks. No tattoos. The legs show no evidence of peripheral edema. The toenails are not dystrophic. Striae are about both knees and hips.

The posterior torso and anus are unremarkable except for a gunshot wound on the left buttock described below.

# **EXTERNAL EVIDENCE OF INJURY:**

- 1. Gunshot wound of left chest into abdomen: On the left lateral chest is a gunshot wound of entrance, situated slightly posterior to the anterior axillary line. 12 cm inferior to and 7 cm posterior to the left nipple, 57 cm from the top of the head. The wound consists of an ovoid 1 cm hole with an eccentric marginal abrasion along the superior edge. Protruding from the abrasion at the superior edge is an irregularly-shaped, 0.5 cm superficial abrasion. No soot deposition, gunpowder stippling, or muzzle imprint is seen. The wound path perforates the skin and subcutis of the left lateral chest wall and enters the left chest cavity through a perforating lateral fracture of the left 8th rib, with localized fresh intercostal soft tissue hemorrhage. The wound path perforates the basilar-lateral edge of the left lower lung lobe, with associated fresh hemorrhage, and then perforates the left hemidiaphragm entering the left upper quadrant of the abdomen. The left chest cavity contains 750 ml of liquid and coagulated blood. The wound path then perforates the anterior edge of the liver and the anterior edge of the spleen resulting in semi-stellate lacerations, perforates the left adrenal gland, and then perforates the stomach near the fundus. The wound path exits the back wall of the stomach and then perforates the root of the mesentery, and then perforates the abdominal aorta. The periaortic and mesentery soft tissues are greatly expanded by fresh hemorrhage. The peritoneal cavity contains 550 ml of liquid blood admixed with spilled gastric material. The wound path then impacts the body of L2 vertebra, resulting in a deep fracture-groove through the right anterolateral aspect, associated with fresh hemorrhage. The fracture does not grossly penetrate into the spinal canal. The wound path then perforates the right iliopsoas muscle then perforates the right iliac wing of the pelvis. The wound path then perforates the lateral skeletal muscle of the right hip and penetrates into the subcutaneous soft tissues of the upper right thigh where a large-caliber bullet with copper-colored jacketing and a crimped nose is recovered. The bullet is recovered at a point in the mid-coronal plane of the leg, 81.5 cm from the top of the head. The path of the wound is oriented left to right, downward at approximately 60 degrees, and front to back at approximately 30-45 degrees.
- 2. Perforating gunshot wound of left groin: On the left base of the penis is a gunshot wound of entrance, situated 21cm inferior to and 2 cm to the left of the umbilicus, 91 cm from the top of the head. The wound consists of a 2 cm, ovoid, somewhat ragged hole that is beveled superiorly and medially such that the entrance is a slit-like defect along the lateral edge. No soot deposition, gunpowder stippling, or muzzle imprint is seen. The wound path perforates the skin and subcutis of the base of the penis, coursing for approximately1 cm beneath the skin where it then exits the groin within the left base of the scrotum through another ovoid 2 cm hole. The wound path immediately re-enters the body in the left femoral area through an atypical 1.5 cm hole that has a wide eccentric marginal abrasion along the lateral edge, 1.5 x 1.2cm in area. The wound path perforates the skin and subcutis of the anterior upper left thigh and perforates skeletal muscle, passing by the femur without impact. Exploration of the wound shows no major artery is injured. The wound path exits the lower lateral aspect of the left buttock through a 1.5 x 1 cm stellate laceration, situated 7 cm to left of the gluteal cleft, 93 cm from the top of the head. No projectile is recovered. The path of the wound is oriented front to back, slightly downward at approximately 20 degrees, and slightly right to left at approximately 20 degrees.

Blunt impact injuries: On the mid forehead is a horizontally arranged group of tiny abrasions forming a 2 cm long horizontal linear abrasion. On the bridge of the nose is a fusiform, 1.2 x 0.5 cm abrasion. Tiny abrasions are on the nose inferior to this abrasion. On the dorsal distal right index finger are two tiny abrasions. On the distal tip of the right ring finger is a 0.3 cm superficial abrasion. On the dorsal proximal right ring finger is a 0.4 cm superficial abrasion. Tiny abrasions are on the dorsal left index and middle fingers. On the proximal dorsal left forearm near the elbow is a 1.5 cm abrasion. On the lateral left elbow is a 1 cm superficial abrasion. On the palmar ulnar aspect of the left hand is an ovoid abrasion-excoriation. A similar ovoid abrasion-excoriation is on the left ventral wrist. These two marks average 0.7cm. On the dorsal left hand between the thumb and index finger is a 2 cm long, wavy longitudinal linear abrasion-superficial cut.

# **INTERNAL EXAMINATION**

# **HEAD:**

The scalp is reflected after making the usual intermastoid incision and is free of subscalpular and subgaleal hemorrhages. The calvarium is intact. No epidural or subdural hemorrhage. The brain weighs 1530 grams and is of the usual configuration covered by glistening, transparent leptomeninges with clear cerebrospinal fluid. The vessels at the base of the brain follow their usual anatomic courses and are patent throughout, without significant atherosclerosis, thrombosis or aneurysm. No evidence of coning or herniation. Recent or remote traumatic lesions or other abnormalities are not noted on serial coronal sectioning in the fresh state. The ventricular system is symmetric and free of blood. No lesions are seen in the mid-brain, brainstem or cerebellum. The bones at the base of the skull are without evidence of fracture. The atlanto-occipital membrane is intact.

## **NECK:**

The hyoid bone and laryngeal cartilages are intact, with flexible joints. The larynx and trachea are unobstructed and lined by pale pink-tan mucosa. No laryngeal mucosal edema. No anterior cervical soft tissue hemorrhage. The cervical spine is intact. No anterior prevertebral fascia hemorrhage.

## **BODY CAVITIES:**

See above under "Evidence of Injury". Testing for free air in the pleural cavities is positive on the left, negative on the right. Liquid and coagulated blood is on the left chest cavity and liquid blood with admixed spilled gastric contents is in the peritoneal cavity. The right chest cavity and pericardial sac are empty. All cavities are free of adhesions. The organs are in their usual anatomic locations. The right lung is expanded while the left is partially collapsed. Serosal surfaces are generally smooth and glistening.

# **CARDIOVASCULAR SYSTEM:**

See above under "Evidence of Injury". The heart weighs 190 grams and is of the usual configuration covered by smooth glistening epicardium. No epicardial petechiae. Serial sections show firm, but pale red-brown fibrillar myocardium without recent or remote infarcts. The heart walls are not thickened. No structural abnormalities. The endocardium is thin and translucent. The heart valves are normally formed, pliable and intact. No vegetations. The coronary ostia are in their usual locations and are patent. The coronary circulation is right dominant. The coronary arteries are free of atherosclerosis and are patent throughout, without thrombosis. The aorta is perforated by gunshot, situated over the 2<sup>nd</sup> lumbar vertebra, surrounded by fresh hemorrhage. The aorta is free of atherosclerosis. No aneurysms. The vena cava and pulmonary arteries are free of antemortem thrombus. The heart and great vessels contain residual fluid blood.

# **RESPIRATORY SYSTEM:**

See above under "Evidence of Injury". The lung weights are: Right – 190 grams; Left – 200 grams. The pleural surfaces are smooth and glistening, and the lungs exhibit the usual lobation with absent anthracotic pigmentation. There is a semi-ovoid laceration of the lateral-basilar LLL surrounded by fresh hemorrhage with an associated contusion of the anteromedial LLL, attributed to gunshot. Otherwise, sections show soft and crepitant, pale pink-tan cut surfaces that are dry. No focal non-traumatic intrapulmonary lesions. The tracheobronchial tree is unobstructed and without mass lesions.

# **LIVER AND PANCREAS:**

See above under "Evidence of Injury". The liver weighs 790 grams and is covered by a smooth capsular surface with sharp anterior margins. A semi-stellate laceration involves the anterior edge of the left lobe with surrounding hemorrhage. Otherwise, sections show firm, pale red-brown cut surfaces that display the usual lobular architecture. No focal intraparenchymal lesions. I can easily pass my thumb through 2 cm thick sections. The gallbladder is intact and contains approximately 5 ml of thin yellow-green bile. The gallbladder mucosa is unremarkable. The bile passages appear patent. No stones. No portal lymphadenopathy. The pancreas is free of antemortem fat necrosis, fibrosis or significant hemorrhages. The pancreas is not grossly injured.

# **GASTROINTESTINAL SYSTEM:**

See above under "Evidence of Injury". The tongue is without evident injury. The pharynx is unobstructed. The esophagus is intact and lined by unremarkable gray-tan mucosa. The stomach is perforated by gunshot. The stomach contains 5 ml of blood admixed with unidentifiable particulate food material. No pill material or peculiar scent. The gastric mucosa is hemolytic-stained but intact, without ulcers or masses. The duodenum and the remainder of the small and large bowels are without evident mucosal abnormalities. The colon contains soft green-brown feces and is free of blood. The appendix is present.

## SPLEEN AND LYMPH NODES:

See above under "Evidence of Injury". The spleen weighs 120 grams and is covered by a blue-gray capsule. A large semi-stellate laceration involves the anterior edge with associated hemorrhage. Otherwise, sections show softened red-brown parenchyma without focal lesions. No enlargement of mediastinal, lung hilar, mesenteric or para-aortic lymph nodes.

## **ENDOCRINE SYSTEM:**

See above under "Evidence of Injury". The left adrenal gland is perforated by gunshot. Otherwise, the adrenals are of the usual size and shape. No cortical masses or medullary hemorrhages. The thyroid gland is of the usual size, shape and consistency. No thyroid cysts or masses. The pituitary gland is unremarkable.

# **UROGENITAL SYSTEM:**

The kidneys are of similar size and shape, each weighing 90 grams. The capsules strip with ease to reveal smooth cortical surfaces and generalized pallor. The kidneys are not injured. However, the left kidney is almost surrounded by perinephric soft tissue hemorrhage. Sections show uniform cortical thickness with distinct cortico-medullary junctions. The calices, pelves and ureters are unremarkable. The bladder contains 15 ml of clear, pale straw-colored urine. The bladder mucosa is unremarkable. The bladder is not injured. The prostate gland is not enlarged.

### MUSCULOSKELETAL SYSTEM:

See above under "Evidence of Injury". The red-brown muscle is firm and without focal non-traumatic abnormalities. No visible or palpable fractures of the bony thorax, vertebral column, pelvis or long bones of the extremities except for those bones injured by gunshot (left 8<sup>th</sup> rib, L2 vertebra, right hemipelvis). The abdominal fat averages 0.7 cm in thickness.

#### TOXICOLOGY:

Samples of peripheral blood, urine, liver, gastric contents, and vitreous humor are retained.

#### HISTOLOGY:

None. Samples of all major viscera are retained in stock.

# PHOTOGRAPHS:

Digital photographs are obtained of external and some internal findings.

### X-RAYS:

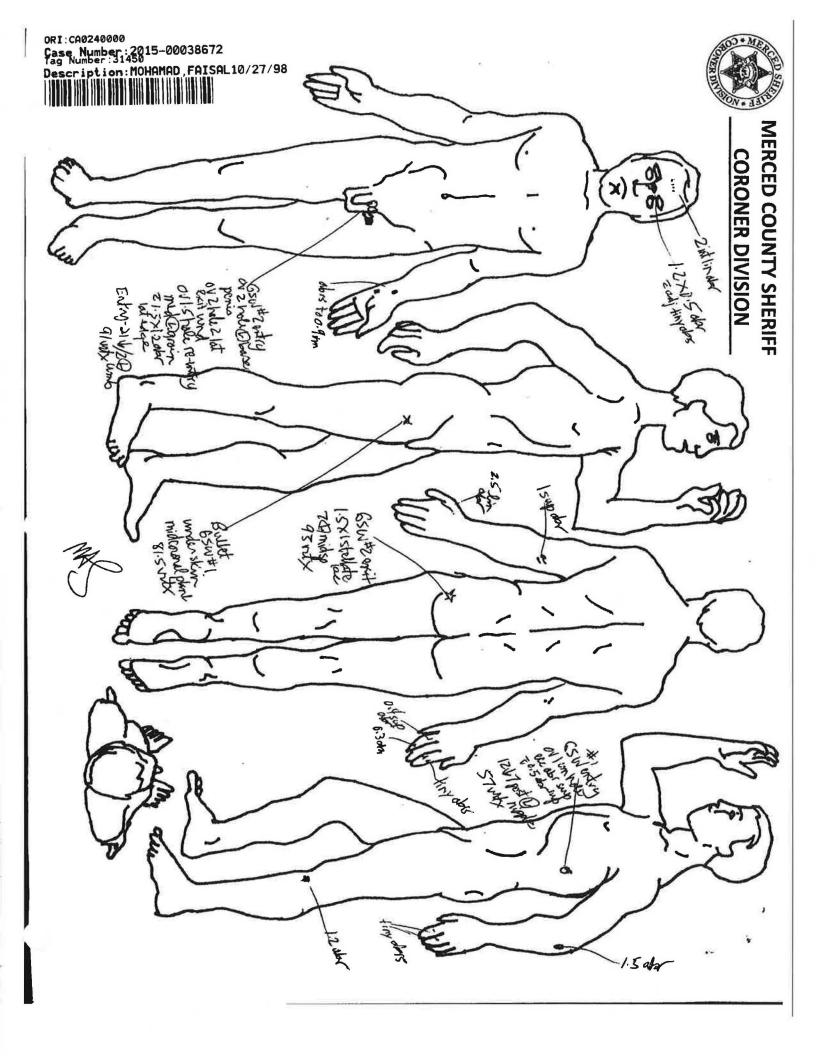
Total body x-rays are obtained. These reveal the single projectile in the right upper thigh area that was recovered.

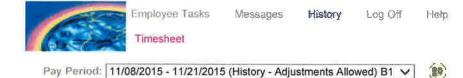
### EVIDENCE:

Fingernail scrapings, head hair and facial hair are obtained. The bags that were over the hands are retained. Two DNA blood spot cards are retained.

END: 15:30.

MAS/mg





BARONE, JAMES A

# Phaser 6180DN Banner Sheet

Date/Time: 00/00/0 00:00

User Name:

# kmcniff

Document Name: 15-38572 TOXICOLOGY.pdf

Start Page



Case Name:

**TOXICOLOGY NUMBER:** 

CVT-15-12581

Muhammad, Faisal

9.5 ml femoral blood (2 gray top vials), 2.75 ml vitreous humor, 3.5 ml urine & liver

tissue each labeled "Mohammad, Faisal; CA0240000; 2015-00038672; Tag 31475; **Specimen Description:** 

MAS; (blds) 1500 hrs; (vit) 1525 hrs; (ur) 1500 hrs; (liver) 1515 hrs"

Delivered by Tricor

06-Nov-15 Date

Received by

Bill Posey

Date 06-Nov-15

Request: Routine Drug Screen

**Agency Case #** 15-38672

Requesting Agency

Merced County Sheriff/Coroner

455 E. 13th

Merced CA 95340

Report To

Merced County Sheriff/Coroner

455 E. 13th

Merced CA 95340

Specimen: Femoral Blood Sample

**RESULTS** 

Routine Drug Screen: No Cocaine, Opiates, PCP, Amphetamines, Barbiturates, Benzodiazepines,

Methadone, Fentanyl, Tricyclic Antidepressants or Carisoprodol detected.

No Ethyl Alcohol or Acetone detected.

B.L. POSEY S.N. KIMBLE Directors

November 12, 2015

1580 Tollhouse Road Clovis, California 93611 Phone (559) 323-9940

Fax (559) 323-7502



Messages

History

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BARONE, JAMES A

Pay Perlod: 11/08/2015 - 11/21/2015 (History - Adjustments Allowed) B1 ✓

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Document Name: 15-38572 AUTOPSY.pdf

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# **Merced County Sheriff's Office Coroner Division**

455 East 13th Street Merced, CA 95341-6213

Vernon H. Warnke **Sheriff-Coroner** 

Mark A. Super, MD Forensic Pathologist

# REPORT OF AUTOPSY

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EXTERNAL EXAMINATION []

DECEDENT: MOHAMMAD, FAISAL

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**AGE:** 18

SEX: Male

HEIGHT: 70 in.

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- 1. Gunshot wound of left chest into abdomen:
  - a. Indeterminate range-type entrance wound, left lateral chest.
  - b. Fracture of left 8th rib.
  - c. Perforation of left lung.
  - d. Left hemopneumothorax (750 ml).
  - e. Perforations of spleen, liver, stomach, and left adrenal gland.
  - f. Perforation of abdominal aorta.
  - g. Hemoperitoneum (550 ml).
  - h. Impact fracture-groove, L2 vertebral body.
  - Perforation of right ilium of pelvis.
  - Large-caliber jacketed bullet recovered from right thigh. j. Large-caliber jacketed bullet recovered from right thigh.k. Wound path: left to right, downward, and front to back.
- 2. Perforating gunshot wound of left groin:
  - a. Indeterminate range-type entrance wound, left base of penis.
  - b. Short subcutaneous wound path.
  - c. Exit wound, left base of scrotum.
  - d. Re-entrance wound, left femoral area.
  - e. Deep soft tissue wound path only.
  - f. Exit wound, left buttock.
  - g. No projectile is recovered.
  - h. Wound path: front to back, slightly downward, and slightly medial to lateral.
- 3. Minor blunt force injuries:
  - a. Abrasions of forehead and nose.
  - b. Abrasions of arms, especially left arm.

CAUSE OF DEATH: Gunshot wound of chest into abdomen. OTHER SIGNIFICANT CONDITIONS: Gunshot wound of left groin.

11-23-15

Mark A. Super, MD Forensic Pathologist

Date

### WITNESSES:

Deputy Coroners N. Nakamura and L. Ruscoe. Detectives Gomes and J. Caires, UC Merced PD. Detective S. Becerra, MCSO.

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Photographs will be taken of the decedent and fingerprints will be obtained.

## **EVIDENCE OF MEDICAL INTERVENTION:**

Disposable defibrillator pads are adhered to the right pectoral area and left chest wall.

## **CLOTHING:**

The following clothing items are on or about the body.

White socks with gray heels and toes. No significant stains or defects.

A pair of black sweat pants are in place. The drawstring is tied. An ovoid gunshot defect is on the left mid-front. Sandy soil is stained about the right side. Another gunshot defect is on the left seat.

3. White briefs are in place. These are bloodstained on the front and left pant leg. A gunshot defect is on the front of the crotch area. An ovoid gunshot defect is on the left seat near the pant leg, surrounded by a dried bloodstain.

4. A hooded green and black windbreaker, brand Columbia Field Gear. This is open in the front and pushed aside exposing underlying garments. An ovoid gunshot defect is on the left side panel. An apparent ovoid gunshot defect is on the right lower front near the zipper.

5. A green jacket. The zipper pull is still up in the front, but the zipper is undone and open, pushed aside, exposing underlying garments. There is apparent gunshot damage to the lower mid-front through both sides of the zipper and an adjacent apparent gunshot defect is on the lower right front. An ovoid gunshot defect with a dried blood stain is on the left side. There is a scuff mark on the left sleeve near the elbow. A folded paper is in the left front pocket. This has lots of writing on it. I did not unfold this and examine it any further at the autopsy.

6. A partially cutaway gray t-shirt that is blank on the front. An ovoid gunshot defect is on the left side surrounded by a large dried bloodstain. An irregular defect is on the lower front near the scissor cut.

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- 1. Gunshot wound of left chest into abdomen: On the left lateral chest is a gunshot wound of entrance, situated slightly posterior to the anterior axillary line, 12 cm inferior to and 7 cm posterior to the left nipple, 57 cm from the top of the head. The wound consists of an ovoid 1 cm hole with an eccentric marginal abrasion along the superior edge. Protruding from the abrasion at the superior edge is an irregularly-shaped, 0.5 cm superficial abrasion. No soot deposition, gunpowder stippling, or muzzle imprint is seen. The wound path perforates the skin and subcutis of the left lateral chest wall and enters the left chest cavity through a perforating lateral fracture of the left 8th rib, with localized fresh intercostal soft tissue hemorrhage. The wound path perforates the basilar-lateral edge of the left lower lung lobe, with associated fresh hemorrhage, and then perforates the left hemidiaphragm entering the left upper quadrant of the abdomen. The left chest cavity contains 750 ml of liquid and coagulated blood. The wound path then perforates the anterior edge of the liver and the anterior edge of the spleen resulting in semi-stellate lacerations, perforates the left adrenal gland, and then perforates the stomach near the fundus. The wound path exits the back wall of the stomach and then perforates the root of the mesentery, and then perforates the abdominal aorta. The periaortic and mesentery soft tissues are greatly expanded by fresh hemorrhage. The peritoneal cavity contains 550 ml of liquid blood admixed with spilled gastric material. The wound path then impacts the body of L2 vertebra, resulting in a deep fracture-groove through the right anterolateral aspect, associated with fresh hemorrhage. The fracture does not grossly penetrate into the spinal canal. The wound path then perforates the right iliopsoas muscle then perforates the right iliac wing of the pelvis. The wound path then perforates the lateral skeletal muscle of the right hip and penetrates into the subcutaneous soft tissues of the upper right thigh where a large-caliber bullet with copper-colored jacketing and a crimped nose is recovered. The bullet is recovered at a point in the mid-coronal plane of the leg, 81.5 cm from the top of the head. The path of the wound is oriented left to right, downward at approximately 60 degrees, and front to back at approximately 30-45 degrees.
- 2. Perforating gunshot wound of left groin: On the left base of the penis is a gunshot wound of entrance, situated 21cm inferior to and 2 cm to the left of the umbilicus, 91 cm from the top of the head. The wound consists of a 2 cm, ovoid, somewhat ragged hole that is beveled superiorly and medially such that the entrance is a slit-like defect along the lateral edge. No soot deposition, gunpowder stippling, or muzzle imprint is seen. The wound path perforates the skin and subcutis of the base of the penis, coursing for approximately1 cm beneath the skin where it then exits the groin within the left base of the scrotum through another ovoid 2 cm hole. The wound path immediately re-enters the body in the left femoral area through an atypical 1.5 cm hole that has a wide eccentric marginal abrasion along the lateral edge, 1.5 x 1.2cm in area. The wound path perforates the skin and subcutis of the anterior upper left thigh and perforates skeletal muscle, passing by the femur without impact. Exploration of the wound shows no major artery is injured. The wound path exits the lower lateral aspect of the left buttock through a 1.5 x 1 cm stellate laceration, situated 7 cm to left of the gluteal cleft, 93 cm from the top of the head. No projectile is recovered. The path of the wound is oriented front to back, slightly downward at approximately 20 degrees, and slightly right to left at approximately 20 degrees.

Blunt impact injuries: On the mid forehead is a horizontally arranged group of tiny abrasions forming a 2 cm long horizontal linear abrasion. On the bridge of the nose is a fusiform, 1.2 x 0.5 cm abrasion. Tiny abrasions are on the nose inferior to this abrasion. On the dorsal distal right index finger are two tiny abrasions. On the distal tip of the right ring finger is a 0.3 cm superficial abrasion. On the dorsal proximal right ring finger is a 0.4 cm superficial abrasion. Tiny abrasions are on the dorsal left index and middle fingers. On the proximal dorsal left forearm near the elbow is a 1.5 cm abrasion. On the lateral left elbow is a 1 cm superficial abrasion. On the palmar ulnar aspect of the left hand is an ovoid abrasion-excoriation. A similar ovoid abrasion-excoriation is on the left ventral wrist. These two marks average 0.7cm. On the dorsal left hand between the thumb and index finger is a 2 cm long, wavy longitudinal linear abrasion-superficial cut.

# **INTERNAL EXAMINATION**

#### HEAD:

The scalp is reflected after making the usual intermastoid incision and is free of subscalpular and subgaleal hemorrhages. The calvarium is intact. No epidural or subdural hemorrhage. The brain weighs 1530 grams and is of the usual configuration covered by glistening, transparent leptomeninges with clear cerebrospinal fluid. The vessels at the base of the brain follow their usual anatomic courses and are patent throughout, without significant atherosclerosis, thrombosis or aneurysm. No evidence of coning or herniation. Recent or remote traumatic lesions or other abnormalities are not noted on serial coronal sectioning in the fresh state. The ventricular system is symmetric and free of blood. No lesions are seen in the mid-brain, brainstem or cerebellum. The bones at the base of the skull are without evidence of fracture. The atlanto-occipital membrane is intact.

## **NECK:**

The hyoid bone and laryngeal cartilages are intact, with flexible joints. The larynx and trachea are unobstructed and lined by pale pink-tan mucosa. No laryngeal mucosal edema. No anterior cervical soft tissue hemorrhage. The cervical spine is intact. No anterior prevertebral fascia hemorrhage.

# **BODY CAVITIES:**

See above under "Evidence of Injury". Testing for free air in the pleural cavities is positive on the left, negative on the right. Liquid and coagulated blood is on the left chest cavity and liquid blood with admixed spilled gastric contents is in the peritoneal cavity. The right chest cavity and pericardial sac are empty. All cavities are free of adhesions. The organs are in their usual anatomic locations. The right lung is expanded while the left is partially collapsed. Serosal surfaces are generally smooth and glistening.

### CARDIOVASCULAR SYSTEM:

See above under "Evidence of Injury". The heart weighs 190 grams and is of the usual configuration covered by smooth glistening epicardium. No epicardial petechiae. Serial sections show firm, but pale red-brown fibrillar myocardium without recent or remote infarcts. The heart walls are not thickened. No structural abnormalities. The endocardium is thin and translucent. The heart valves are normally formed, pliable and intact. No vegetations. The coronary ostia are in their usual locations and are patent. The coronary circulation is right dominant. The coronary arteries are free of atherosclerosis and are patent throughout, without thrombosis. The aorta is perforated by gunshot, situated over the 2<sup>nd</sup> lumbar vertebra, surrounded by fresh hemorrhage. The aorta is free of atherosclerosis. No aneurysms. The vena cava and pulmonary arteries are free of antemortem thrombus. The heart and great vessels contain residual fluid blood.

# **RESPIRATORY SYSTEM:**

See above under "Evidence of Injury". The lung weights are: Right – 190 grams; Left – 200 grams. The pleural surfaces are smooth and glistening, and the lungs exhibit the usual lobation with absent anthracotic pigmentation. There is a semi-ovoid laceration of the lateral-basilar LLL surrounded by fresh hemorrhage with an associated contusion of the anteromedial LLL, attributed to gunshot. Otherwise, sections show soft and crepitant, pale pink-tan cut surfaces that are dry. No focal non-traumatic intrapulmonary lesions. The tracheobronchial tree is unobstructed and without mass lesions.

### LIVER AND PANCREAS:

See above under "Evidence of Injury". The liver weighs 790 grams and is covered by a smooth capsular surface with sharp anterior margins. A semi-stellate laceration involves the anterior edge of the left lobe with surrounding hemorrhage. Otherwise, sections show firm, pale red-brown cut surfaces that display the usual lobular architecture. No focal intraparenchymal lesions. I can easily pass my thumb through 2 cm thick sections. The gallbladder is intact and contains approximately 5 ml of thin yellow-green bile. The gallbladder mucosa is unremarkable. The bile passages appear patent. No stones. No portal lymphadenopathy. The pancreas is free of antemortem fat necrosis, fibrosis or significant hemorrhages. The pancreas is not grossly injured.

### **GASTROINTESTINAL SYSTEM:**

See above under "Evidence of Injury". The tongue is without evident injury. The pharynx is unobstructed. The esophagus is intact and lined by unremarkable gray-tan mucosa. The stomach is perforated by gunshot. The stomach contains 5 ml of blood admixed with unidentifiable particulate food material. No pill material or peculiar scent. The gastric mucosa is hemolytic-stained but intact, without ulcers or masses. The duodenum and the remainder of the small and large bowels are without evident mucosal abnormalities. The colon contains soft green-brown feces and is free of blood. The appendix is present.

# SPLEEN AND LYMPH NODES:

See above under "Evidence of Injury". The spleen weighs 120 grams and is covered by a blue-gray capsule. A large semi-stellate laceration involves the anterior edge with associated hemorrhage. Otherwise, sections show softened red-brown parenchyma without focal lesions. No enlargement of mediastinal, lung hilar, mesenteric or para-aortic lymph nodes.

# **ENDOCRINE SYSTEM:**

See above under "Evidence of Injury". The left adrenal gland is perforated by gunshot. Otherwise, the adrenals are of the usual size and shape. No cortical masses or medullary hemorrhages. The thyroid gland is of the usual size, shape and consistency. No thyroid cysts or masses. The pituitary gland is unremarkable.

# **UROGENITAL SYSTEM:**

The kidneys are of similar size and shape, each weighing 90 grams. The capsules strip with ease to reveal smooth cortical surfaces and generalized pallor. The kidneys are not injured. However, the left kidney is almost surrounded by perinephric soft tissue hemorrhage. Sections show uniform cortical thickness with distinct cortico-medullary junctions. The calices, pelves and ureters are unremarkable. The bladder contains 15 ml of clear, pale straw-colored urine. The bladder mucosa is unremarkable. The bladder is not injured. The prostate gland is not enlarged.

### MUSCULOSKELETAL SYSTEM:

See above under "Evidence of Injury". The red-brown muscle is firm and without focal non-traumatic abnormalities. No visible or palpable fractures of the bony thorax, vertebral column, pelvis or long bones of the extremities except for those bones injured by gunshot (left 8<sup>th</sup> rib, L2 vertebra, right hemipelvis). The abdominal fat averages 0.7 cm in thickness.

### TOXICOLOGY:

Samples of peripheral blood, urine, liver, gastric contents, and vitreous humor are retained.

### HISTOLOGY:

None. Samples of all major viscera are retained in stock.

# PHOTOGRAPHS:

Digital photographs are obtained of external and some internal findings.

### X-RAYS:

Total body x-rays are obtained. These reveal the single projectile in the right upper thigh area that was recovered.

### **EVIDENCE**

Fingernail scrapings, head hair and facial hair are obtained. The bags that were over the hands are retained. Two DNA blood spot cards are retained.

END: 15:30.

MAS/mg

